EVALUATION OF MEDICAL STUDENT PERFORMANCE ON WORLD WIDE WEB DELIVERED INFORMATION LITERACY COURSE

Anthony J. Frisby, Ph.D., Michael D. Hamlin, Ph.D.,
Elizabeth R. Warner, M.S.L.S, Christopher D. Braster,
Rodney B. Murray, Ph.D.
Academic Information Services & Research
Thomas Jefferson University

PURPOSE

To address the range of computer and information literacy skills among first year medical students and to expose students to the expanding knowledge base, a program which evaluates student use and opinions of computer-based learning materials, provides tutorials on information systems and assess differences in learned skills was developed. This poster presentation demonstrates the design of the course, differences in pre- post-test scores for different student populations using the program, and student evaluations.

METHODOLOGY

222 first year medical students were required to complete a pre-test, suite of tutorials which describe the navigation and use of the library's information systems, an on-line case study, a post-test and evaluation form delivered over the Internet. The case includes questions from the patient, a genetic counselor and information specialists. Responses were stored with the student's identification number in an Oracle database for analysis. After completion of the course, students were required to complete an evaluative questionnaire regarding their use and preferences for CBL in general and this program in particular.

This suite of information tools has since been used with sophomore medical students, allied health science students and residents in Jefferson's Medicine Department. The different groups represented different learning needs and backgrounds, therefore direct comparison with the first year medical students is not appropriate.

RESULTS

Comparison of first year medical student pre-post-test scores indicated a significant improvement (Table 1).

Table 1: First Year Medical Student Scores

PreTest %		PostTest %	
Mean	39.26	Mean	80.85
St. Err	0.811	St. Err	0.832
Median	40	Median	85
Mode	40	Mode	85
St. Dev.	12.27	St. Dev.	12.59
Variance	150.75	Variance	158.59
Min.	12	Min.	10
Max.	76	Max.	100
Count	229	Count	229

Comparison with other populations is not possible, but general conclusions based on their improvement in scores, and similar evaluations indicate an overall improvement in post-test scores and satisfaction with the on-line course.

CONCLUSIONS

Student scores improved significantly in the first year medical student group. At the time of writing, the sample size from the other groups does not permit accurate statistical analysis. Data should be available during the poster presentation. Feedback regarding the cases indicated student support of the instructional medium. Both students and faculty consider the on-line cases a success. The course materials remain on-line at this time and may be accessed by users outside the University's domain. The URL for JEFFLINE, Jefferson's academic information system is: http://jeffline.tju.edu.

0195—4210/96/$5.00